

# ***Short-Term and Winter Fuels Outlook***

**Guy F. Caruso  
Administrator  
Energy Information Administration**

**New York Energy Forum  
New York, NY  
October 16, 2007  
[www.eia.doe.gov](http://www.eia.doe.gov)**

## ***Tight global oil market conditions are projected to continue through 2008.***

---

- OPEC production decisions will continue to influence the oil market situation.
- Low surplus production capacity of 2 to 3 million barrels per day, concentrated in Saudi Arabia, weakens the market's ability to respond to supply disruptions.
- Oil prices likely to remain high at least through 2008.
- Many uncertainties could alter the outlook and create volatility in global oil markets.

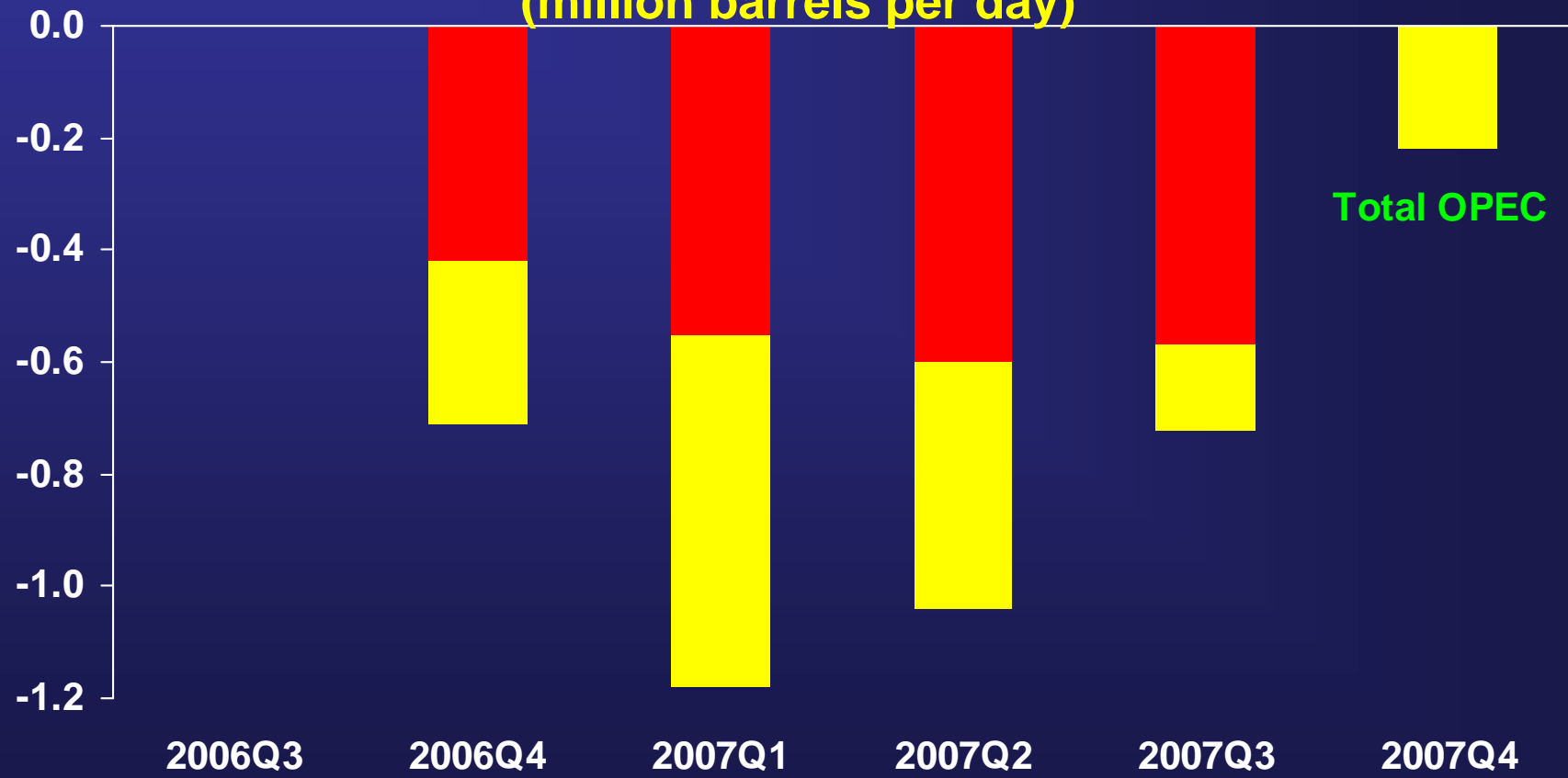
**Crude oil prices, having recently exceeded \$80 per barrel, are projected to decline slowly over the forecast.**



WTI = West Texas Intermediate crude oil.

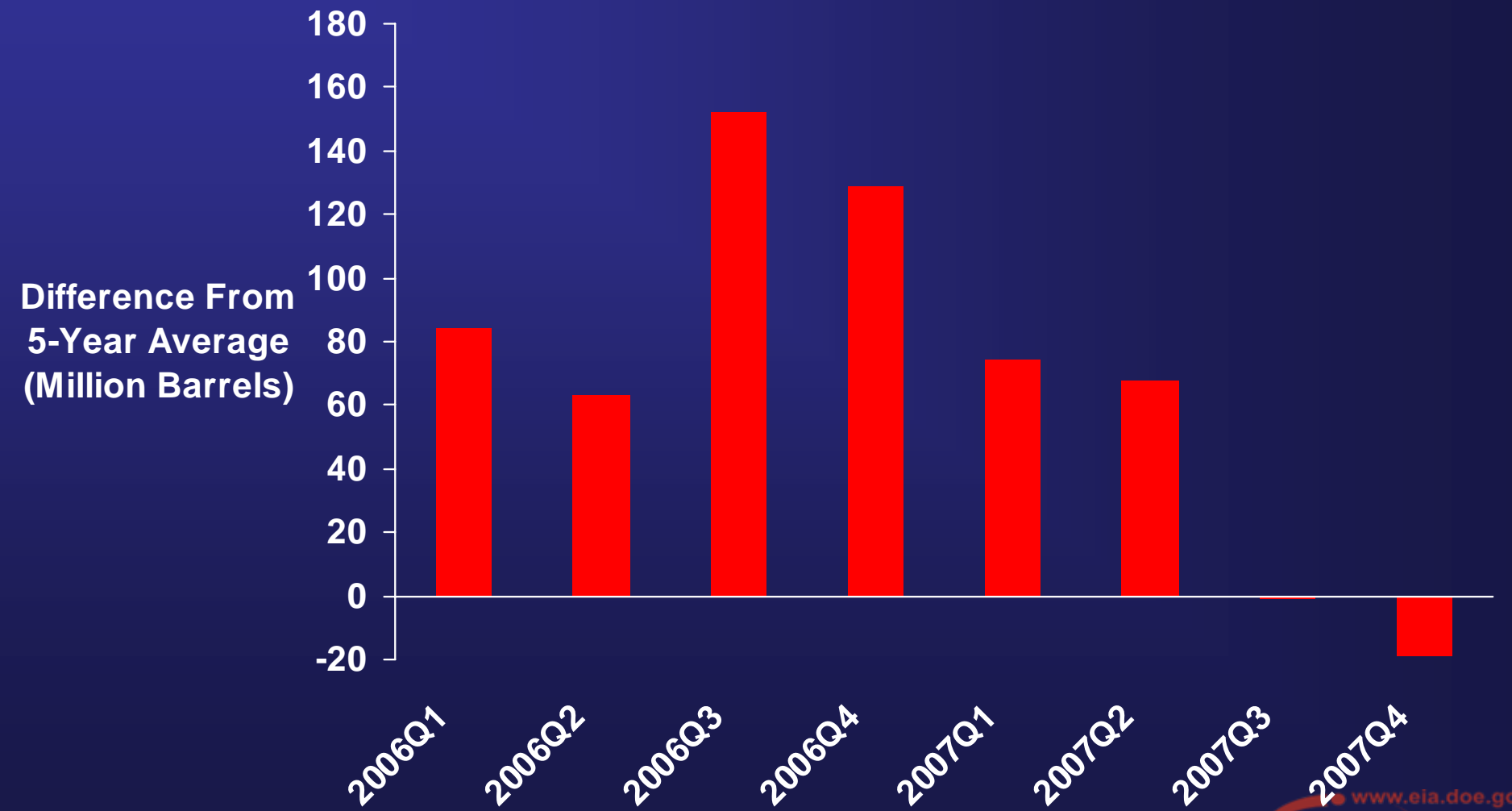
# ***OPEC cut crude oil production last fall to firm world oil markets.***

**Change in Production Since 3<sup>rd</sup> Quarter 2006  
(million barrels per day)**

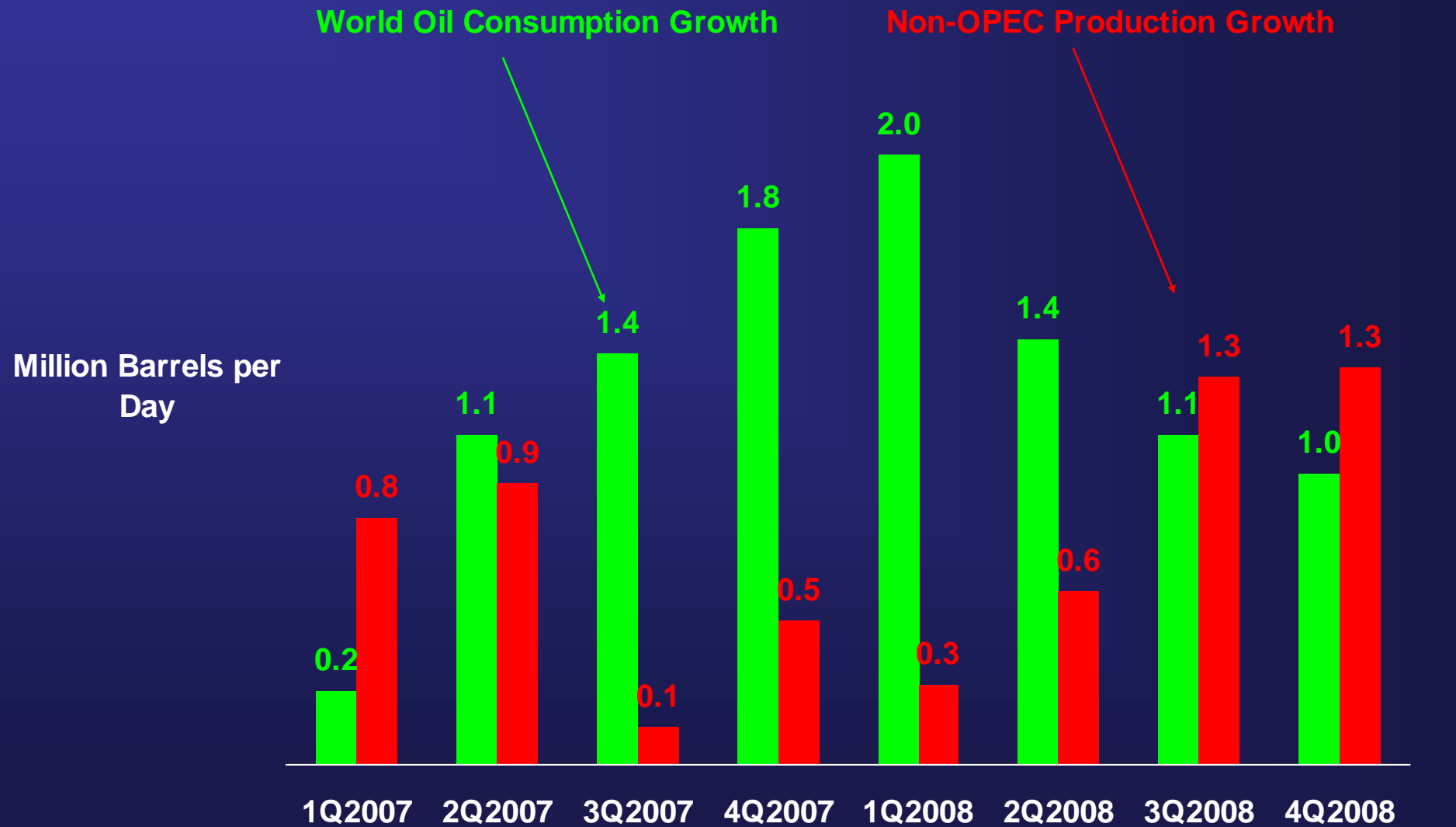


**■ Saudi Arabia ■ Rest of OPEC**

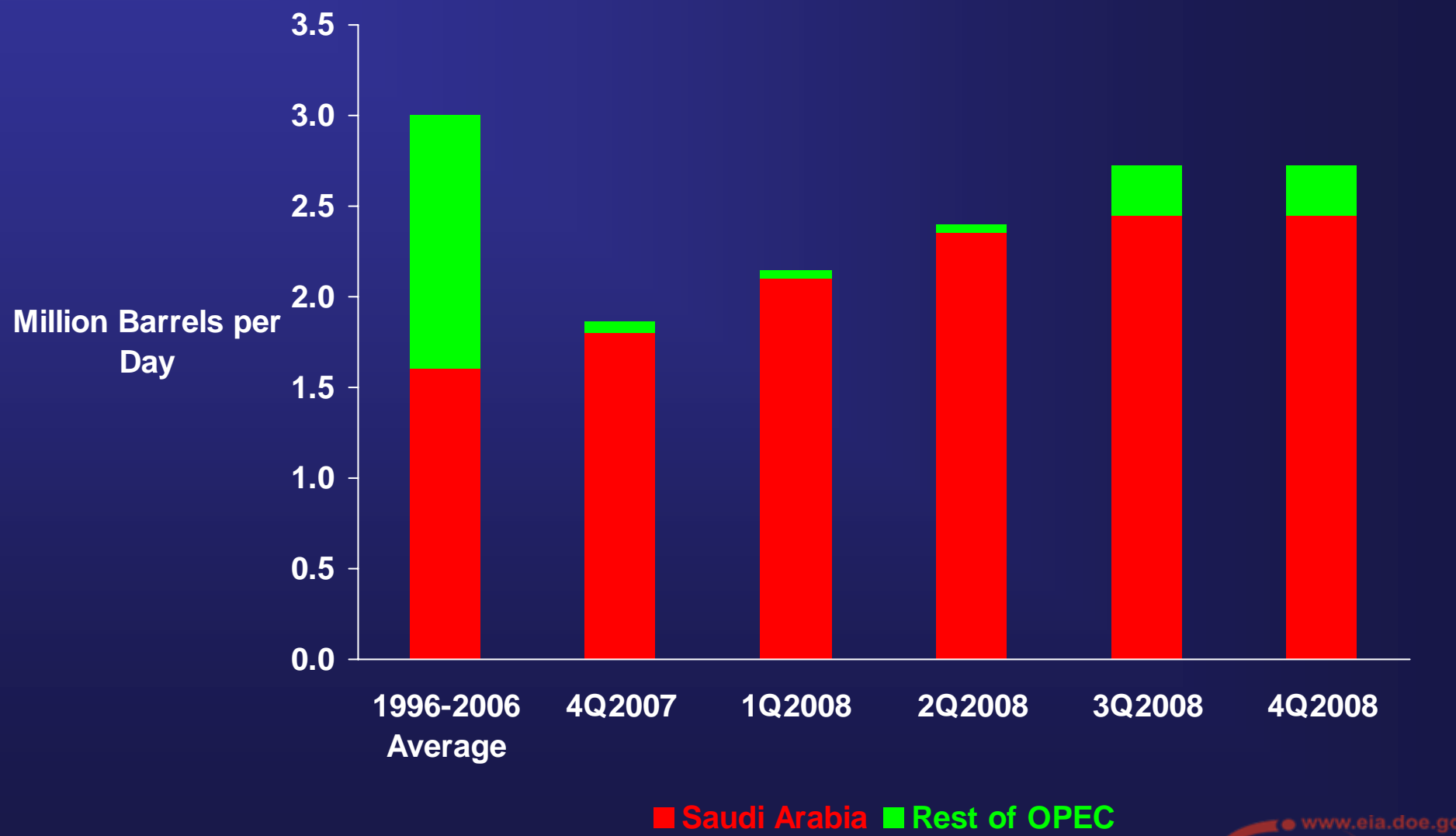
***OECD commercial stocks have fallen from record highs to near-normal levels.***



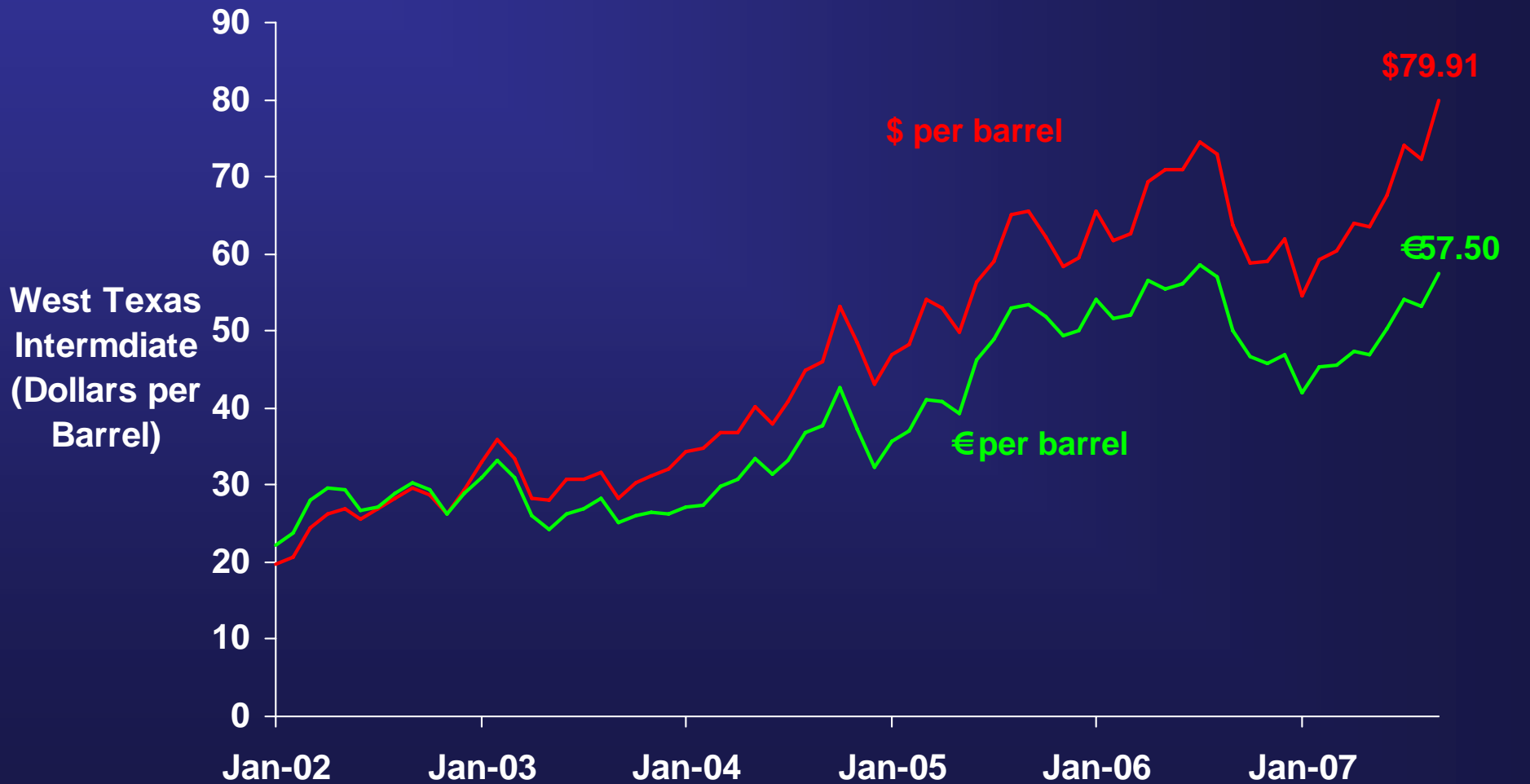
# Market balance may loosen slightly in 2008.



# OPEC surplus production capacity remains low.



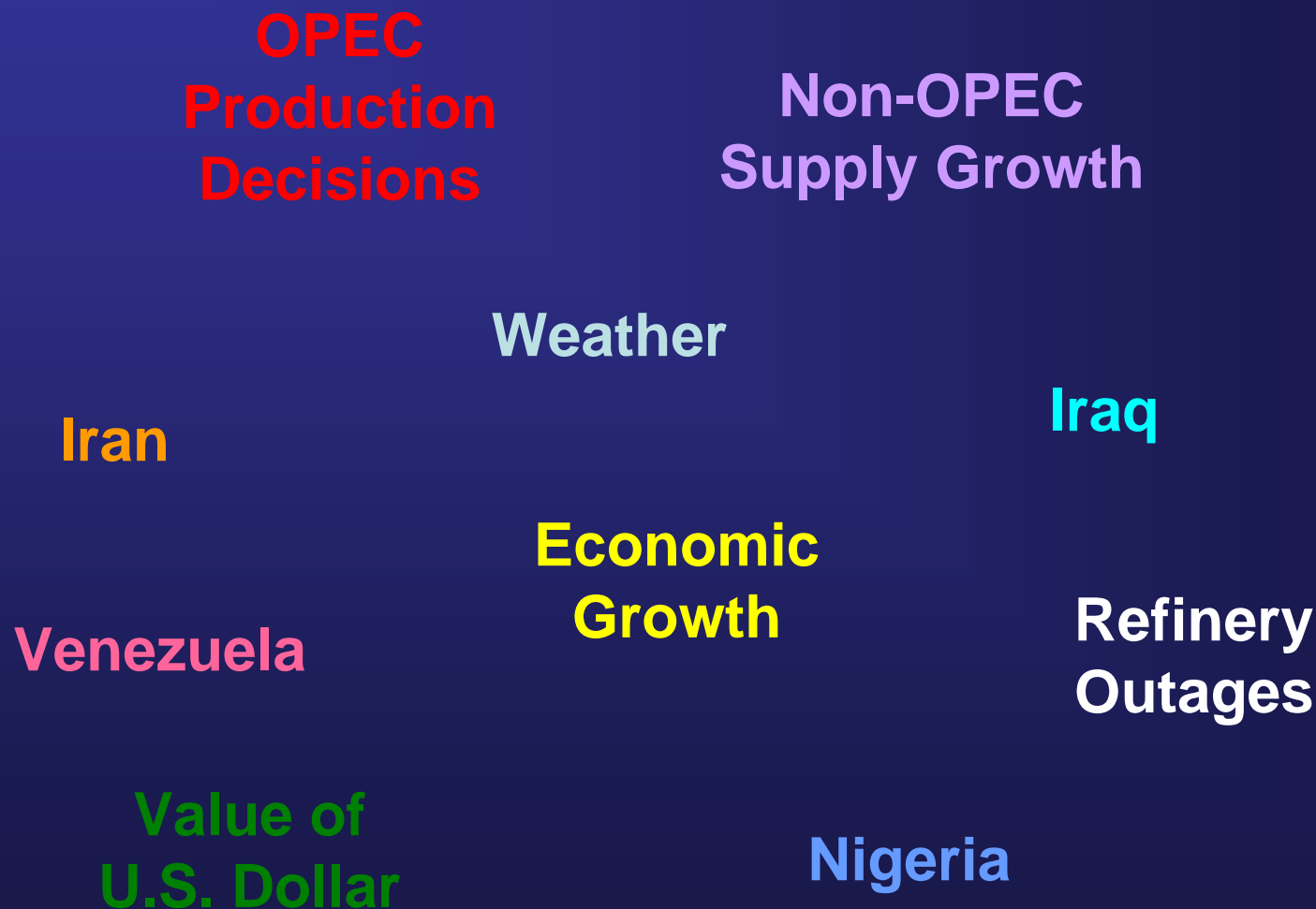
***Dollar-based economies have experienced higher oil prices than those with other currencies.***





# ***Multiple and hard-to-predict uncertainties drive the oil market forecast.***

---



# ***U.S. average fuel expenditures are expected to be higher for all fuels this winter, October – March.***

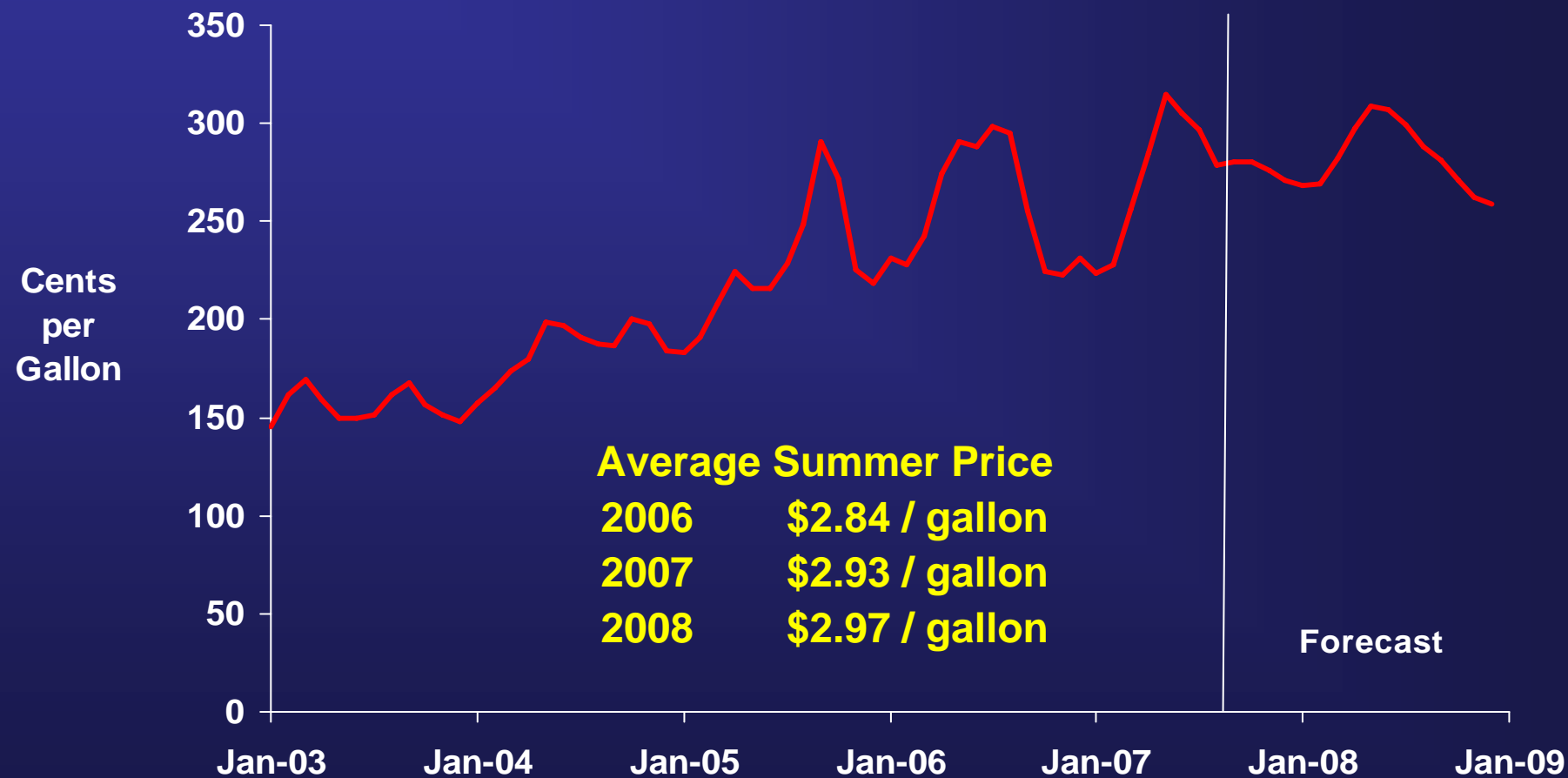
<b>Fuel</b>	<b>Average Household Expenditures (Percent Change from Last Winter)</b>		
	<b>Base Case</b>	<b>If 10% Warmer Than Forecast</b>	<b>If 10% Colder Than Forecast</b>
<b>Natural Gas</b>	<b>9.5</b>	<b>-1.7</b>	<b>20.3</b>
<b>Heating Oil</b>	<b>21.8</b>	<b>9.8</b>	<b>31.6</b>
<b>Propane</b>	<b>16.3</b>	<b>4.3</b>	<b>27.7</b>
<b>Electricity</b>	<b>3.9</b>	<b>-1.3</b>	<b>7.2</b>
<b>Average Expenditures</b>	<b>9.8</b>	<b>0.1</b>	<b>18.4</b>

Winter = October 1 through March 31.

Expenditures are based on typical per household consumption adjusted for weather. Warmer and colder cases represent 10-percent decrease or 10-percent increase in heating degree-days, respectively.

# ***Retail gasoline prices are projected to be higher in 2008.***

---



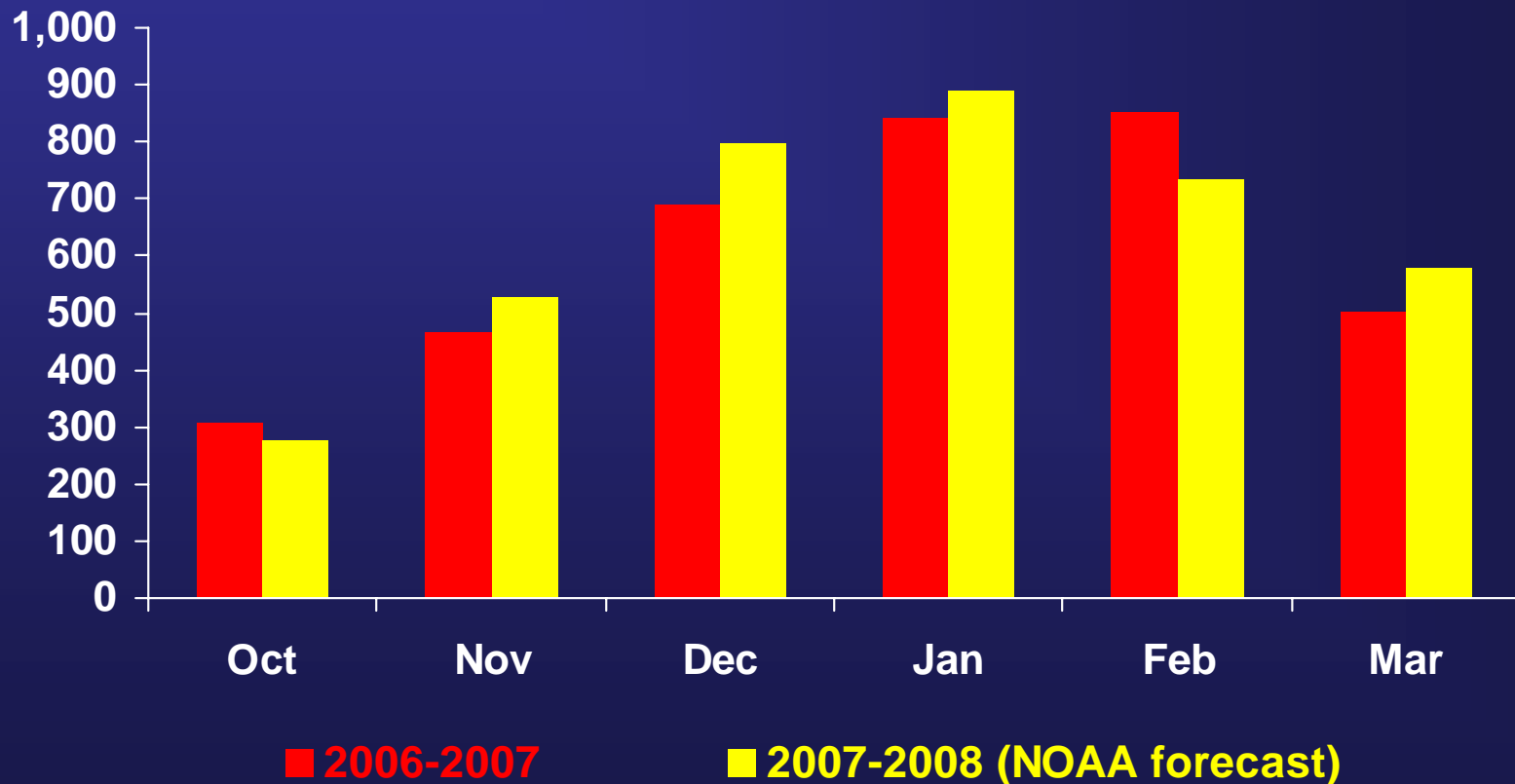
Summer = April 1 through September 30.

*Short-Term Energy Outlook, October 2007*

***Winter 2007-2008 is expected to be 4 percent colder than 2006-2007 but still 2 percent warmer than 30-year average.***

---

## U.S. Heating Degree-Days Population-Weighted



# ***Natural gas prices are expected to be higher than last winter.***

## **Henry Hub Winter Average Spot Price**

**10% Colder = \$8.71/ mcf**

**Base Case = \$7.79/ mcf**

**10% Warmer = \$7.05/ mcf**

## **Residential Winter Average Price**

**10% Colder = \$13.53/ mcf**

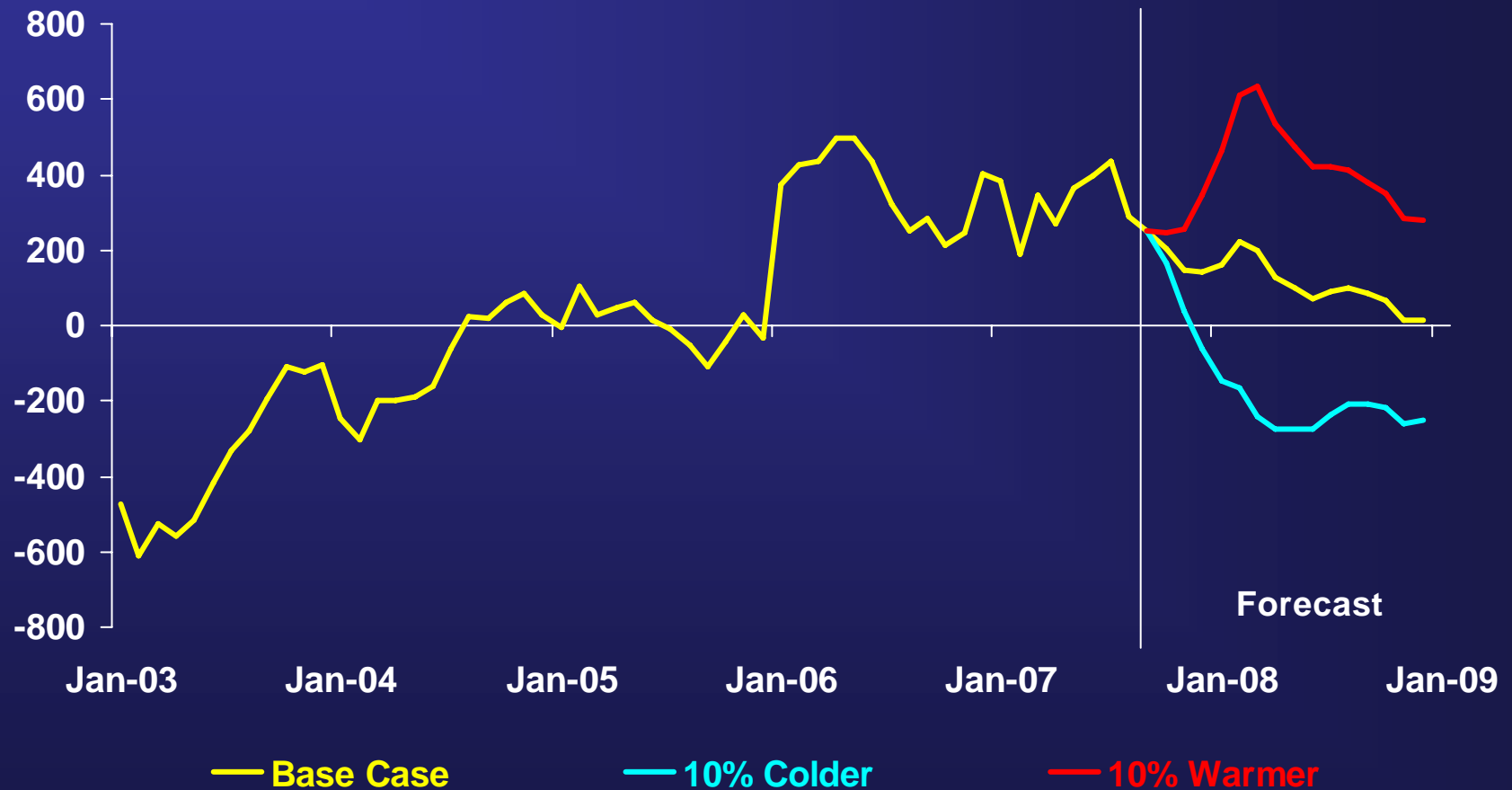
**Base Case = \$13.14/ mcf**

**10% Warmer = \$12.87/ mcf**



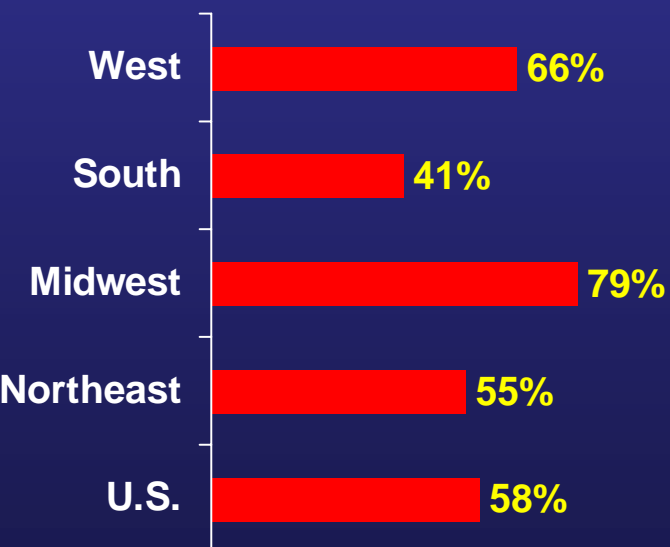
# *U.S. natural gas in storage is projected to remain above historical averages.*

Deviation from 5-year Average (Billion Cubic Feet)



# ***Natural gas heating bills are projected to be higher for all regions this winter.***

## **Households using natural gas as primary heating fuel**



## **Percent Change from Last Winter (Projected)**

	Consumption	Average Price	Total Expenditures
West	+ 2	+ 2	+ 5
South	+ 1	+ 9	+ 11
Midwest	+ 3	+ 8	+ 11
Northeast	+ 6	+ 4	+ 10
U.S. Average	+ 3	+ 6	+ 10

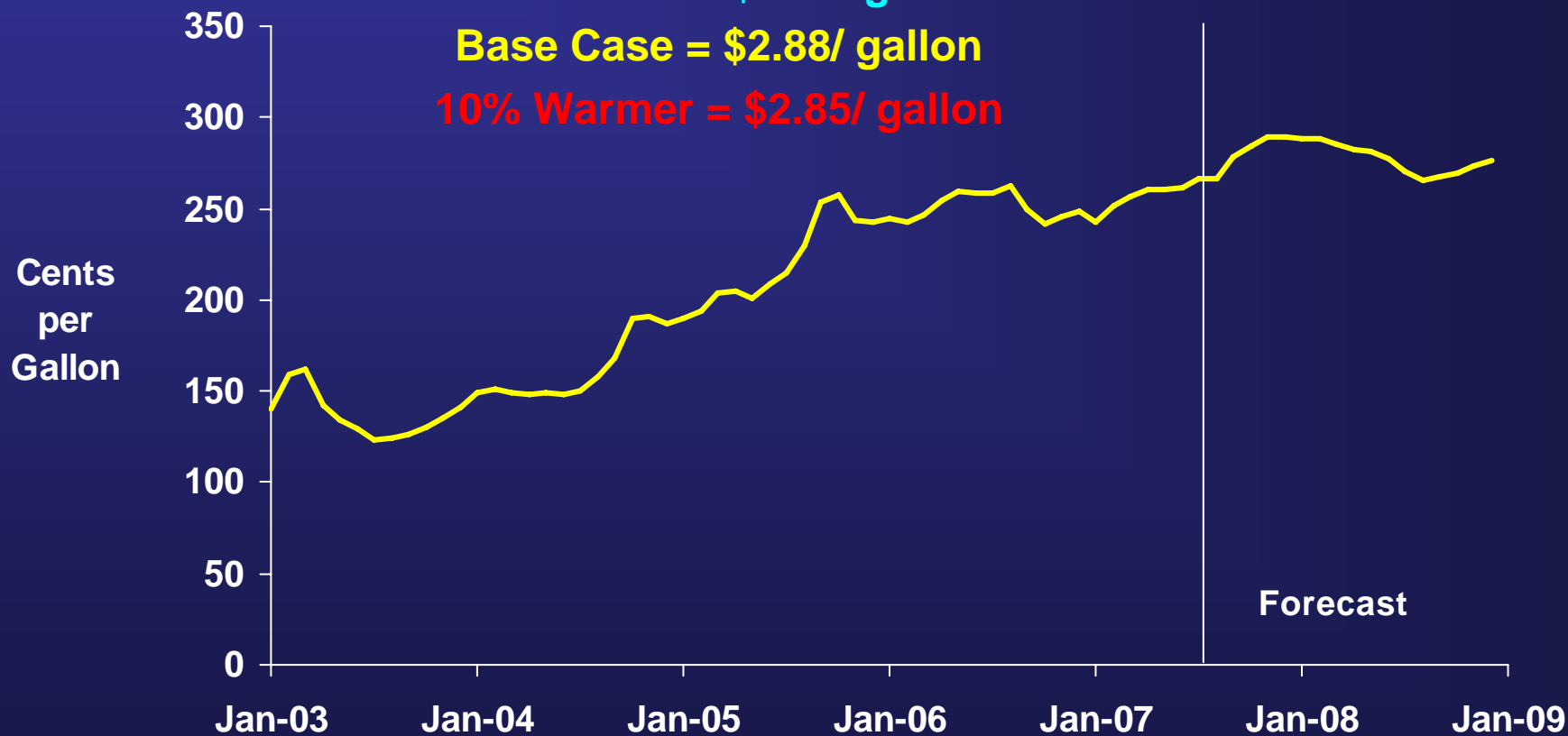
***Retail heating oil prices are projected to average about 40 cents per gallon higher than last winter.***

**October 2007 – March 2008 Average**

**10% Colder = \$2.91/ gallon**

**Base Case = \$2.88/ gallon**

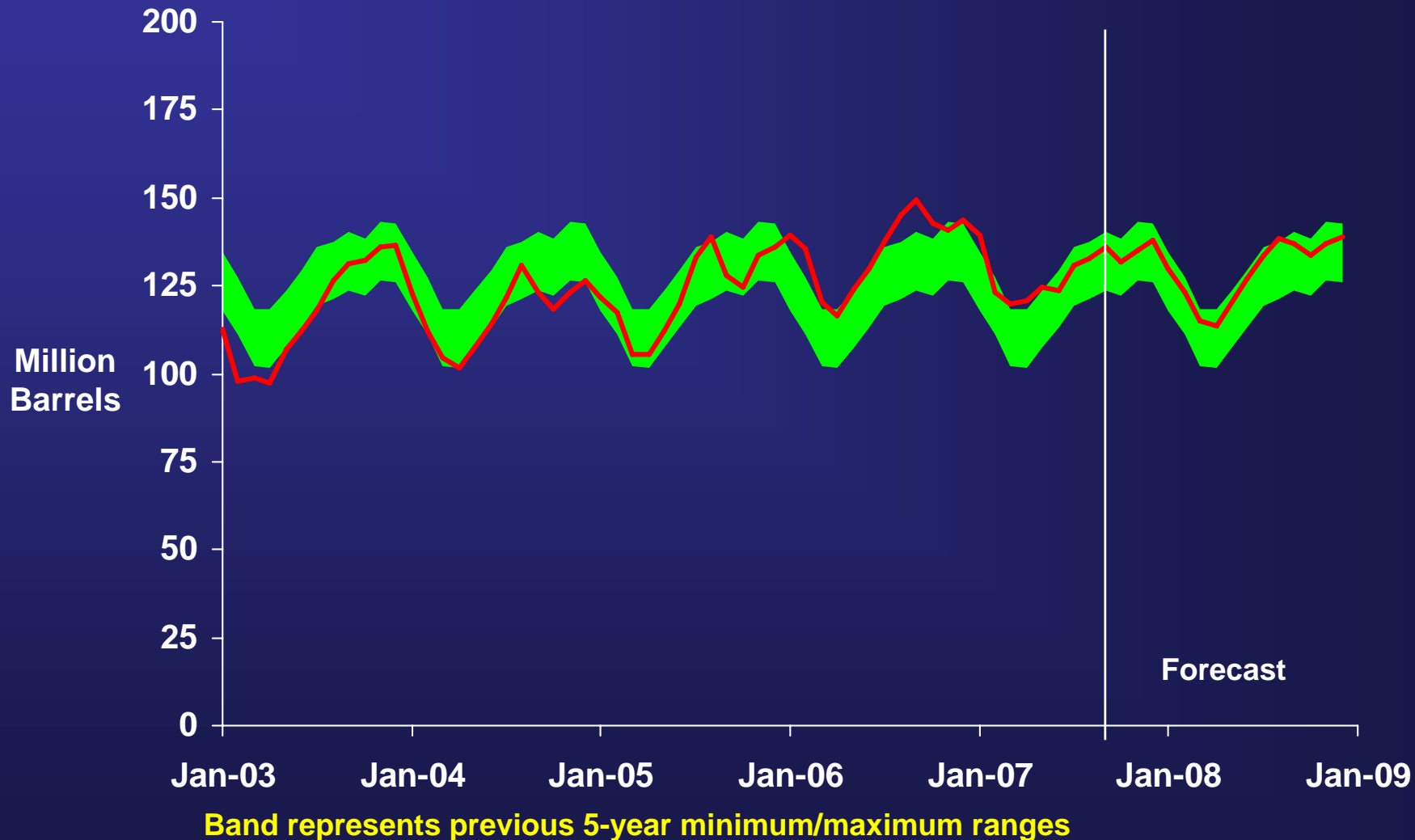
**10% Warmer = \$2.85/ gallon**





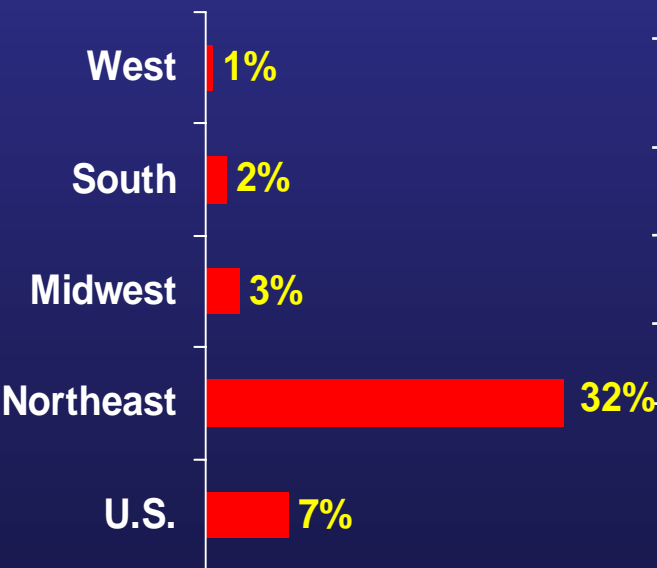
# ***Distillate fuel inventories are expected to remain at average levels.***

---



# ***U.S. winter heating oil expenditures projected to increase for all regions.***

**Households using heating oil  
as primary heating fuel**

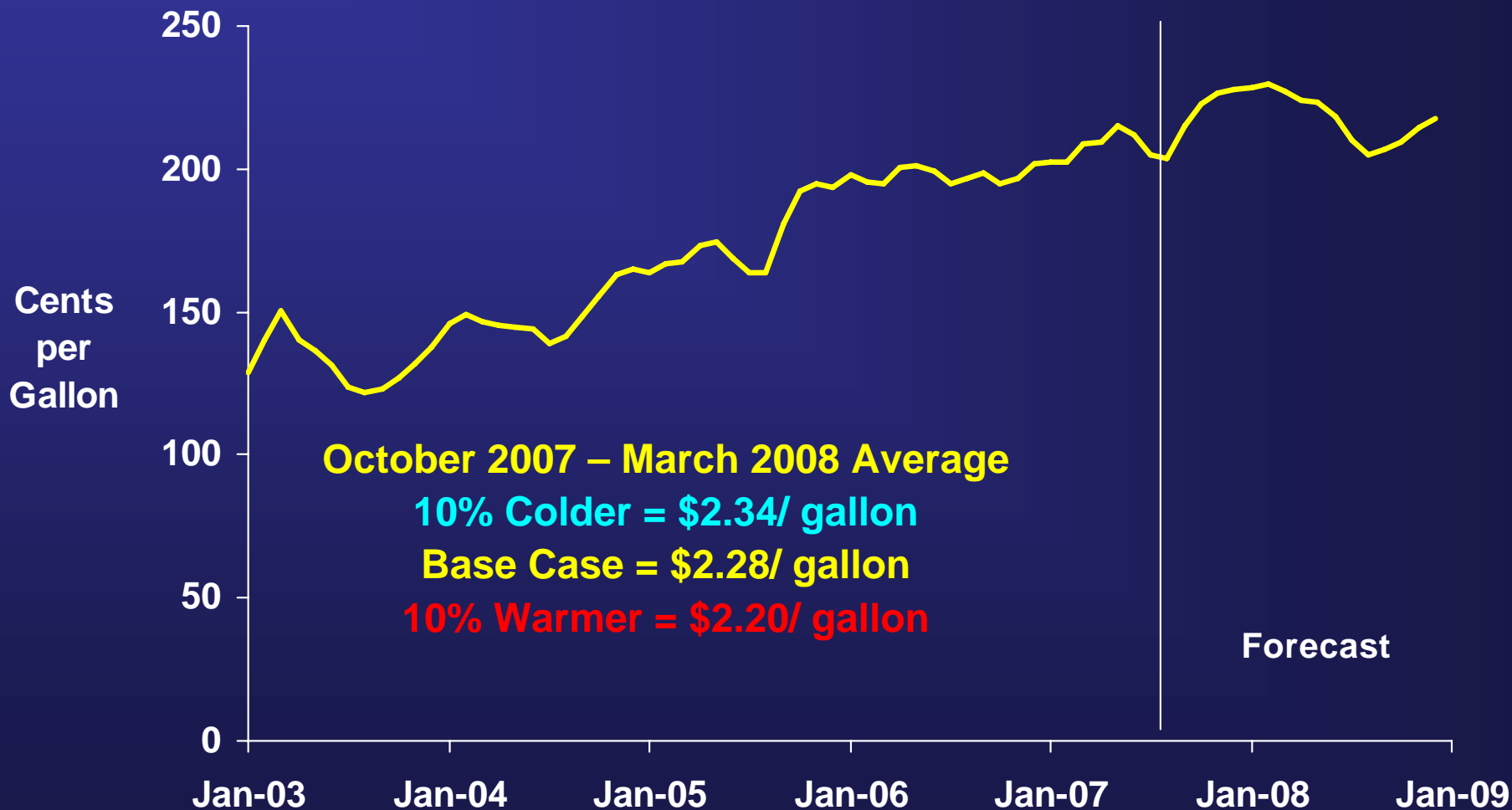


## **Percent Change from Last Winter (Projected)**

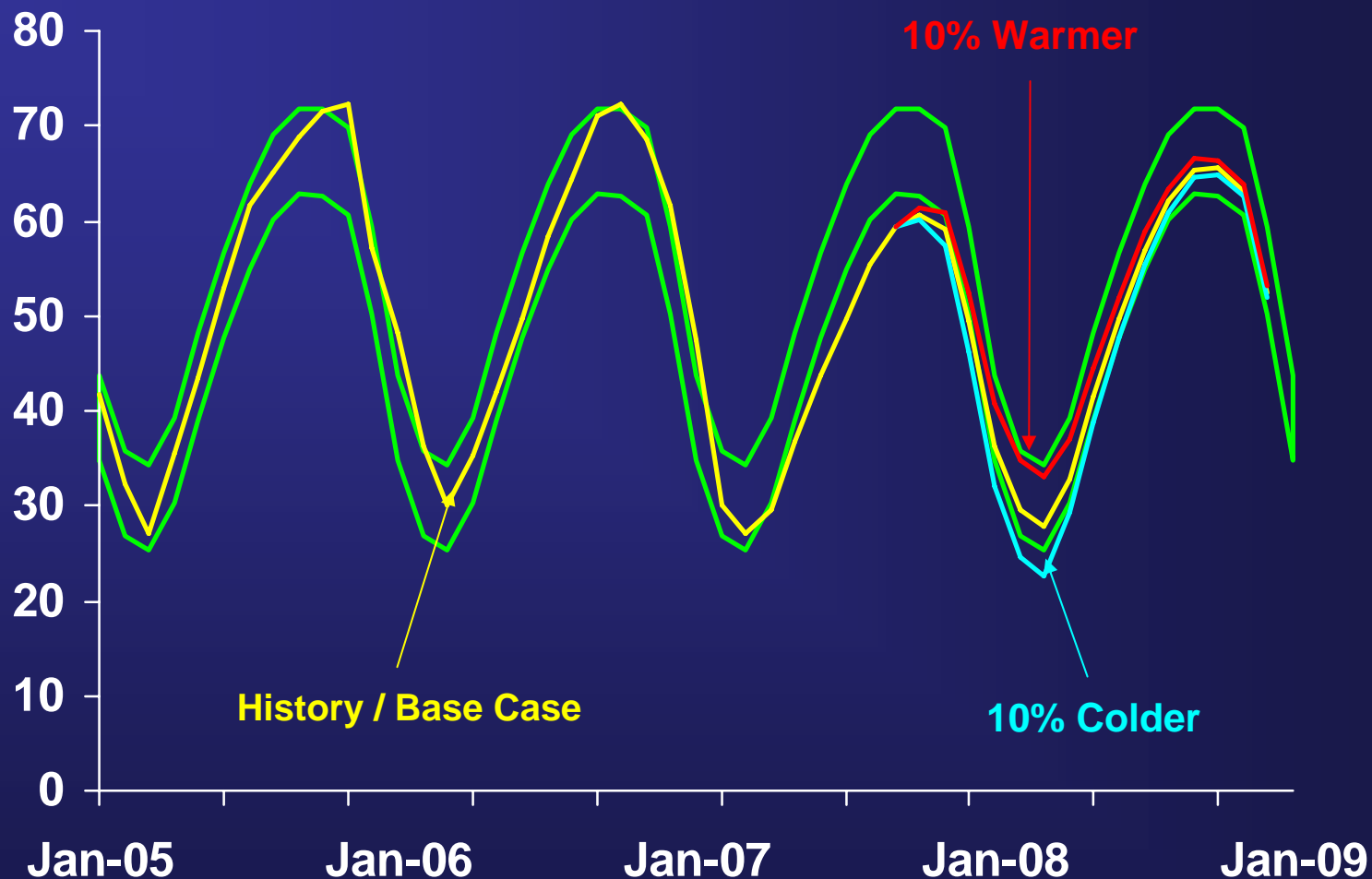
	Consumption	Average Price	Total Expenditures
West	+ 4	+ 13	+ 18
South	+ 6	+ 19	+ 26
Midwest	+ 4	+ 18	+ 23
Northeast	+ 5	+ 16	+ 22
U.S. Average	+ 5	+ 16	+ 22

***Residential propane prices are expected to average about 23 cents per gallon higher than last winter.***

---



# Propane inventories are low.



Colored green bands represent normal range published in Energy Information Administration, *Weekly Petroleum Status Report*.

# Propane expenditures are projected to increase in all regions.

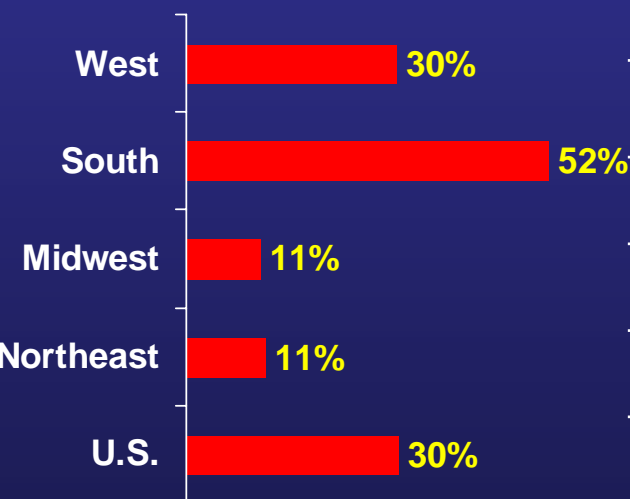
Households using propane as primary heating fuel

## Percent Change from Last Winter (Projected)

		Consumption	Average Price	Total Expenditures
West	4%	West	+ 2	+ 8
South	5%	South	+ 2	+ 13
Midwest	7%	Midwest	+ 4	+ 15
Northeast	2%	Northeast	+ 5	+ 15
U.S.	5%	U.S. Average	+ 3	+ 13

# Winter electricity expenditure increases are expected to be smaller than other fuels.

Households using electricity as primary heating fuel



## Percent Change from Last Winter (Projected)

	Consumption	Average Price	Total Expenditures
West	+ 2	+ 4	+ 5
South	+ 1	+ 2	+ 3
Midwest	+ 2	+ 2	+ 4
Northeast	+ 4	+ 3	+ 7
U.S. Average	+ 2	+ 2	+ 4

# Summary

---

- On average, U.S. households will pay about \$88, or 10 percent, more for heating this winter.
- Higher expenditures are driven by higher fuel prices and weather-related increases in consumption.
- Under the baseline forecast, natural gas expenditures could be about \$78, or 10 percent, higher for the average U.S. household this winter.
- Heating oil expenditures are projected to be about \$319, or 22 percent, higher for the average U.S. household this winter.
- Electricity expenditures are forecasted to be \$32, or 4 percent, higher for the average U.S. household this winter.
- A colder winter would raise estimated expenditures somewhat from those of the base case.

## Periodic Reports

*Petroleum Status and Natural Gas Storage Reports, weekly*

*Short-Term Energy Outlook, monthly*

*Annual Energy Outlook 2007, February 2007*

*International Energy Outlook 2007, May 2007*

## Examples of Special Analyses

*“Economic Effects of High Oil Prices,” Annual Energy Outlook 2006*

*Analysis of Oil and Gas Production in the Arctic National Wildlife Refuge,*

*March 2004*

*The Global Liquefied Natural Gas Market: Status and Outlook, December 2003*

*“Impacts of Increased Access to Oil and Natural Gas Resources in the Lower 48 Federal Outer Continental Shelf,” Annual Energy Outlook 2007*

**[www.eia.doe.gov](http://www.eia.doe.gov)**

**Guy F. Caruso**

**[guy.caruso@eia.doe.gov](mailto:guy.caruso@eia.doe.gov)**

*Short-Term Energy Outlook, October 2007*

